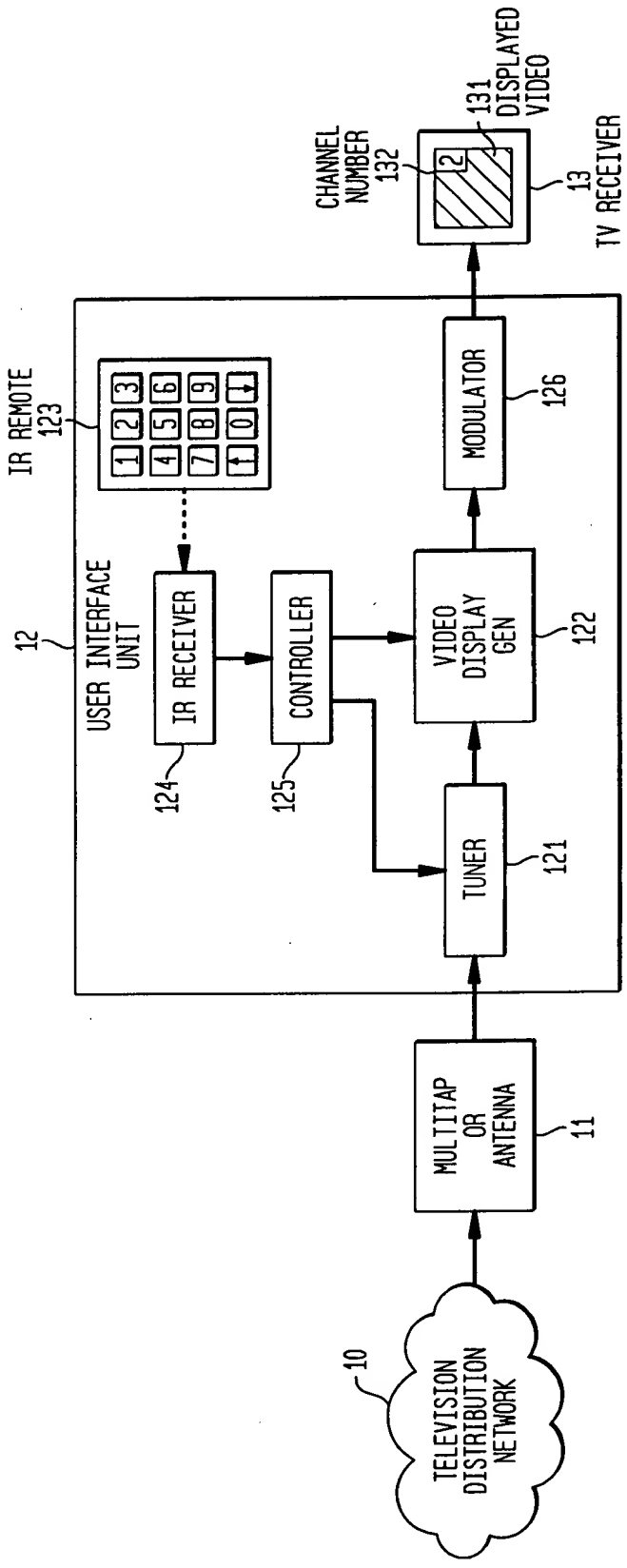


FIG. 1
SYSTEM FOR SELECTING TELEVISION CHANNELS FOR DISPLAY ON A TELEVISION RECEIVES

FIG. 2
(PRIOR ART)

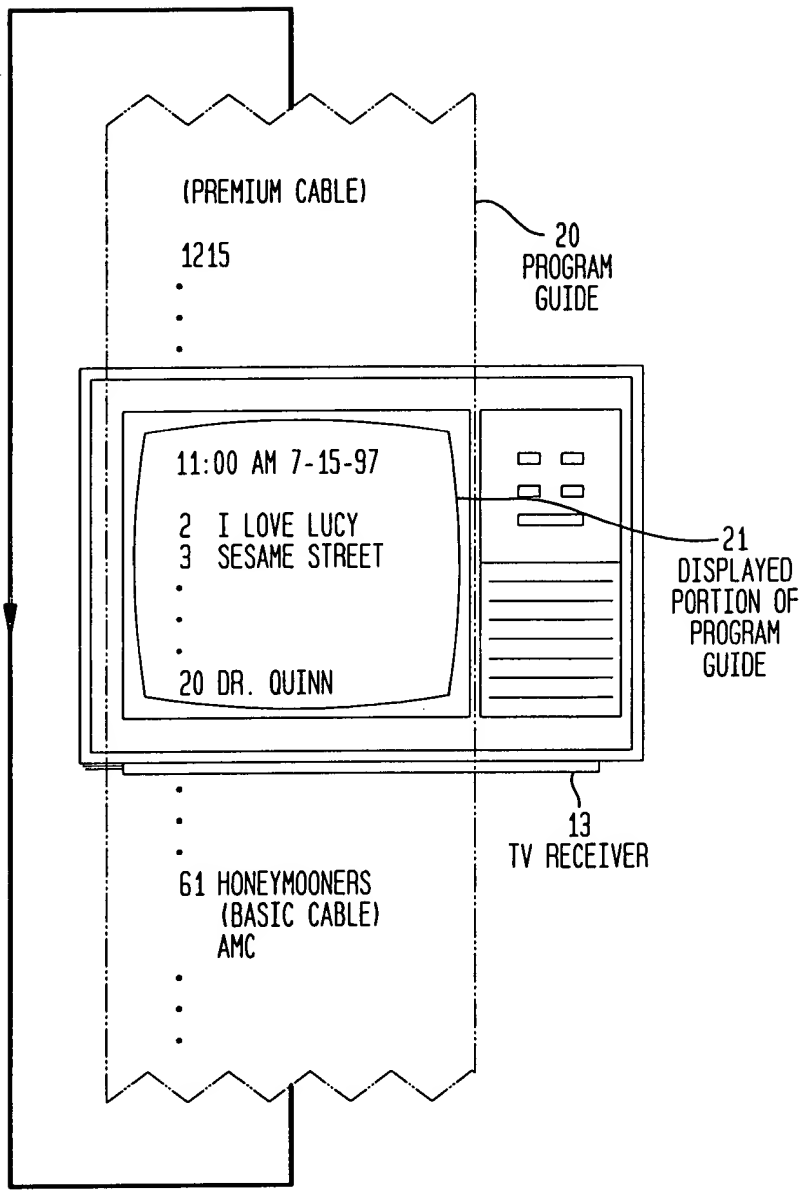


FIG. 3
(PRIOR ART)

USER-INTERFACE UNIT FOR
AN INTERACTIVE ELECTRONIC
PROGRAM GUIDE SYSTEM

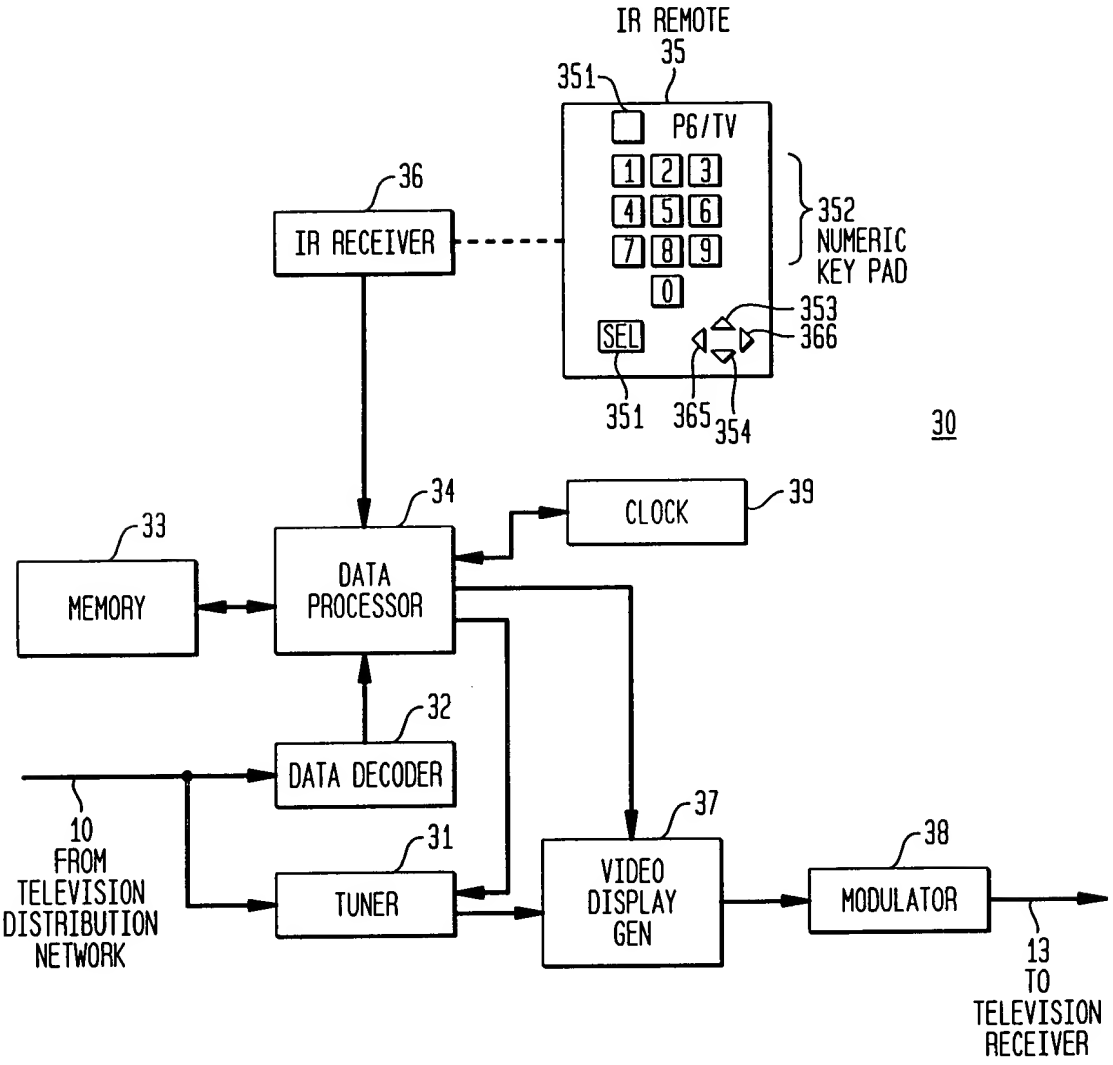


FIG. 4

PROGRAM GUIDE DISPLAYED
ON A TELEVISION RECEIVER

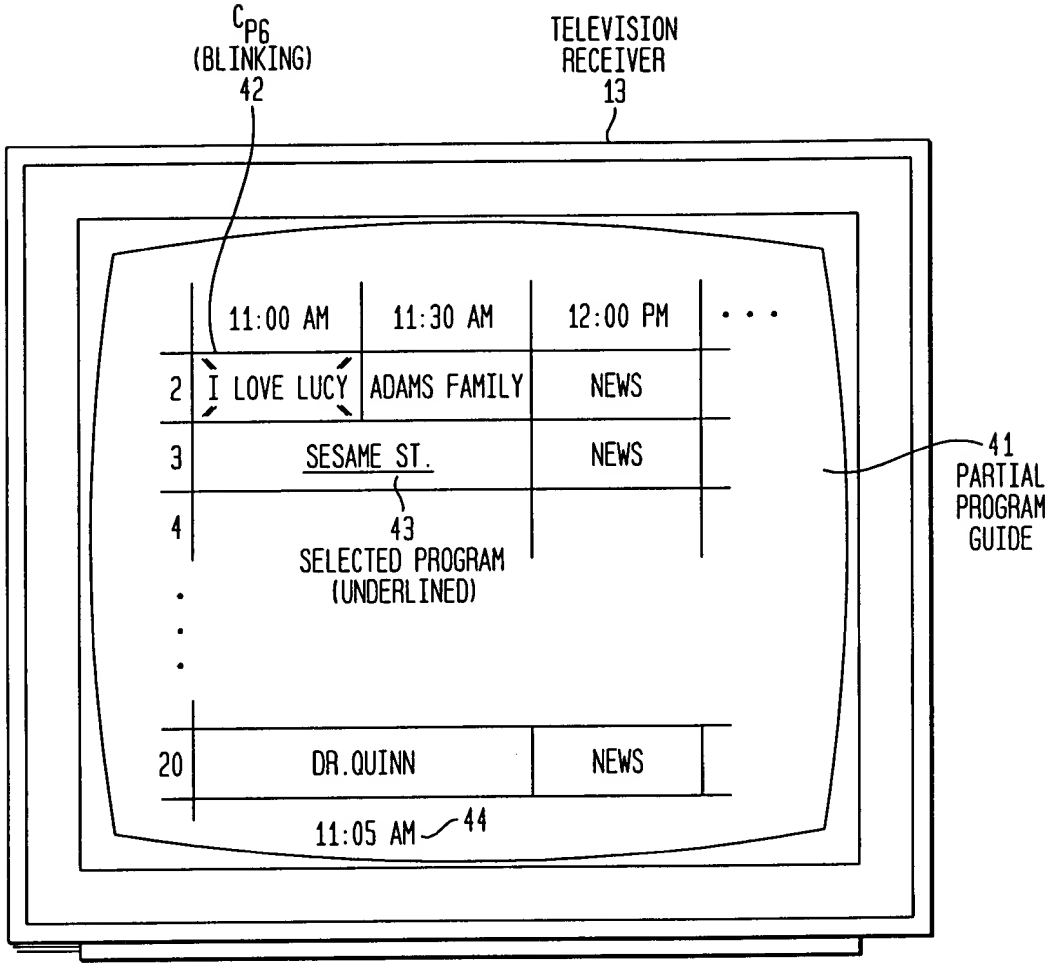


FIG. 5

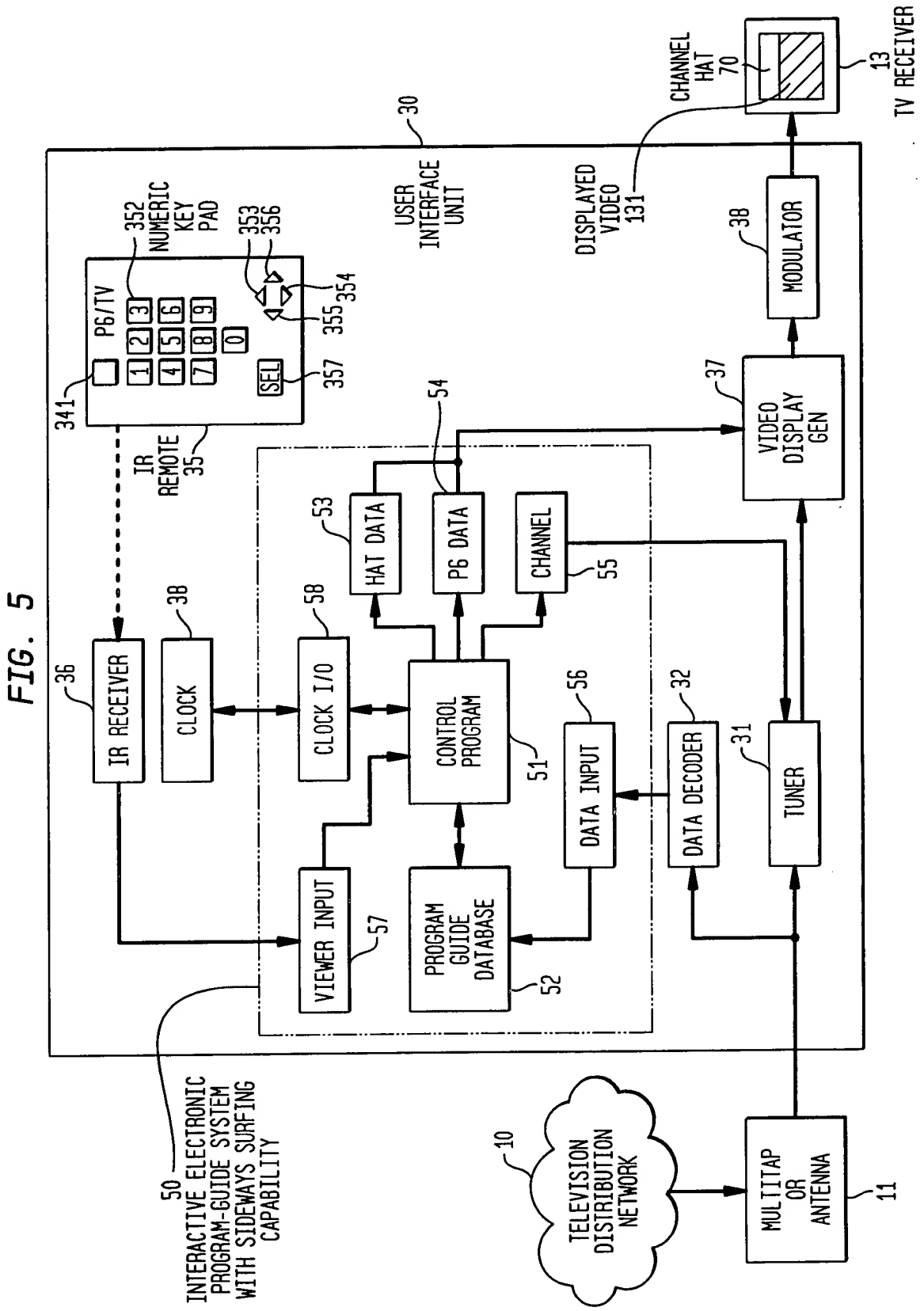

50
INTERACTIVE ELECTRONIC PROGRAM-GUIDE SYSTEM WITH SIDEWAYS SURFING CAPABILITY
30
USER INTERFACE UNIT
341
P6/TV
352
NUMERIC KEY PAD
353
356
354
355
357
SEL
IR REMOTE 35
36
IR RECEIVER
38
CLOCK
58
CLOCK I/O
53
HAT DATA
54
P6 DATA
CHANNEL
55
CONTROL PROGRAM
51
56
DATA INPUT
32
DATA DECODER
31
TUNER
VIEWER INPUT
57
PROGRAM GUIDE DATABASE
52
37
VIDEO DISPLAY GEN
38
MODULATOR
DISPLAYED VIDEO 131
CHANNEL HAT 70
13
TV RECEIVER
10
TELEVISION DISTRIBUTION NETWORK
MULTITAP OR ANTENNA
11

FIG. 6A

PROGRAM-GUIDE DATABASE

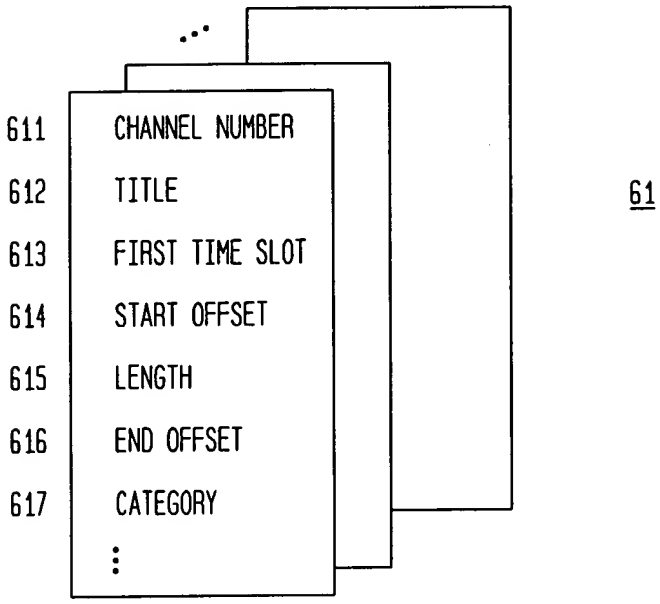


FIG. 6C

VARIABLES MAINTAINED BY ELECTRONIC PROGRAM GUIDE TO SUPPORT SIDEWAYS SURFING

63	SLE	SURF LEFT ENABLE
64	SLN	SURF LEFT CHANNEL NO.
65	SRE	SURF RIGHT ENABLE
66	SRN	SURF RIGHT CHANNEL NO.
67	NCN	NEXT CATEGORY CHANNEL NO.
68	PCN	PREVIOUS CATEGORY CHANNEL NO.

FIG. 6B

CHANNEL HAT

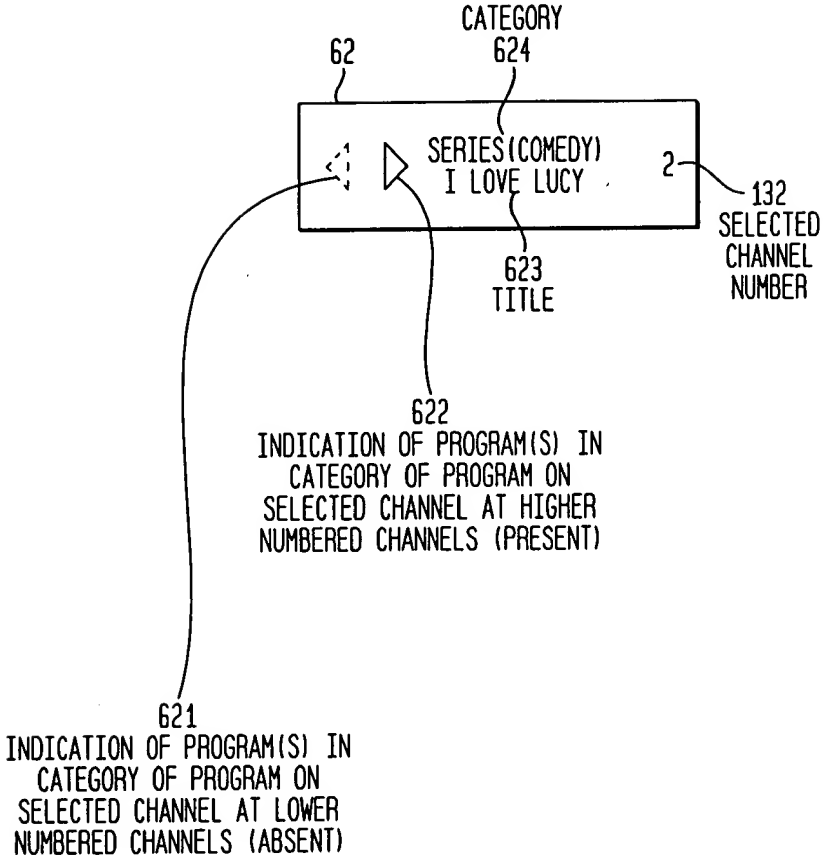


FIG. 7

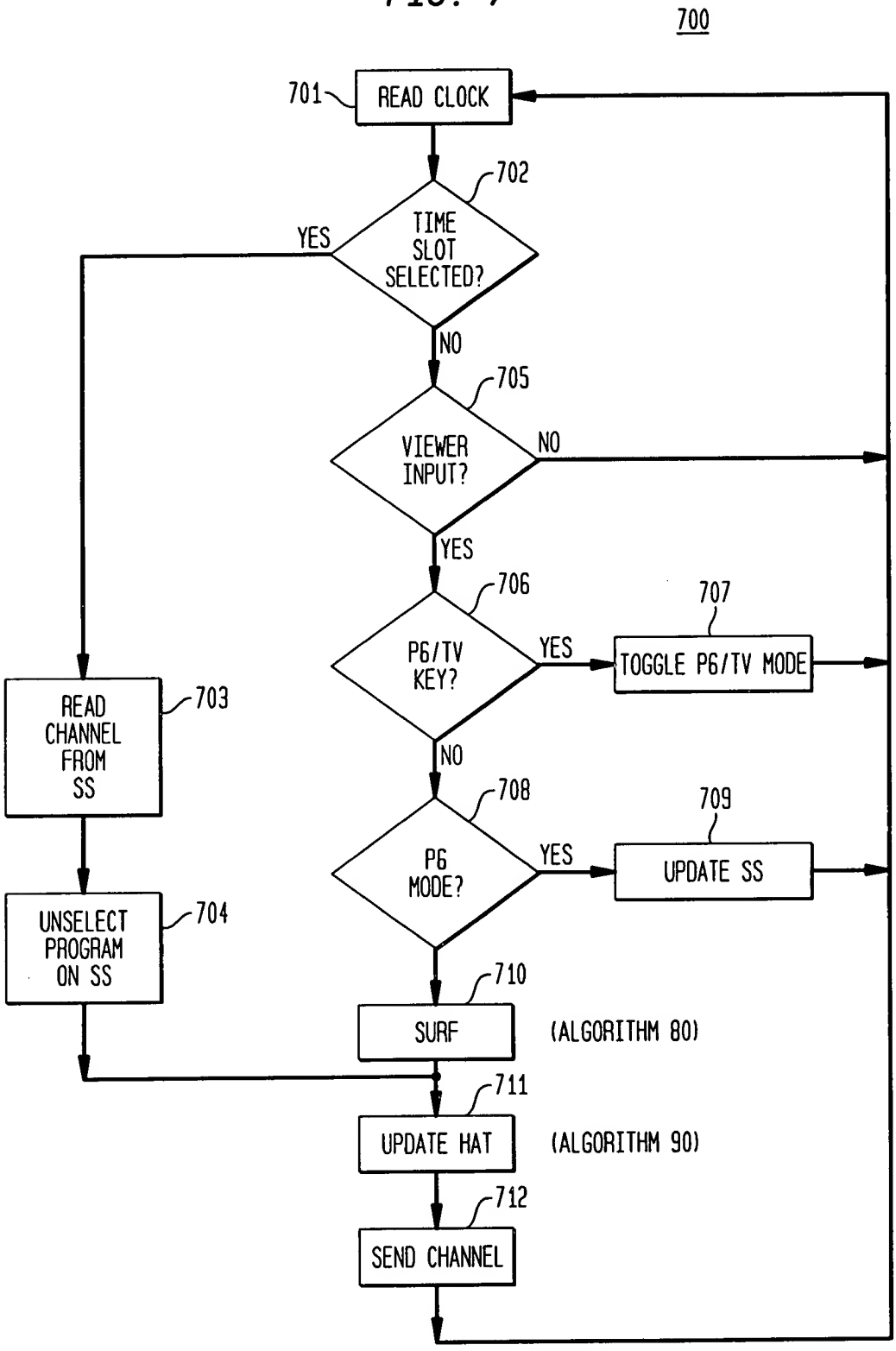

700
701
READ CLOCK
702
TIME SLOT SELECTED?
YES
NO
705
VIEWER INPUT?
NO
YES
706
P6/TV KEY?
YES
707
TOGGLE P6/TV MODE
NO
708
P6 MODE?
YES
709
UPDATE SS
703
READ CHANNEL FROM SS
704
UNSELECT PROGRAM ON SS
710
SURF
(ALGORITHM 80)
711
UPDATE HAT
(ALGORITHM 90)
712
SEND CHANNEL

FIG. 8
FLOW CHART OF ALGORITHM USED IN SELECTING CHANNELS AND SURFING IN TV MODE

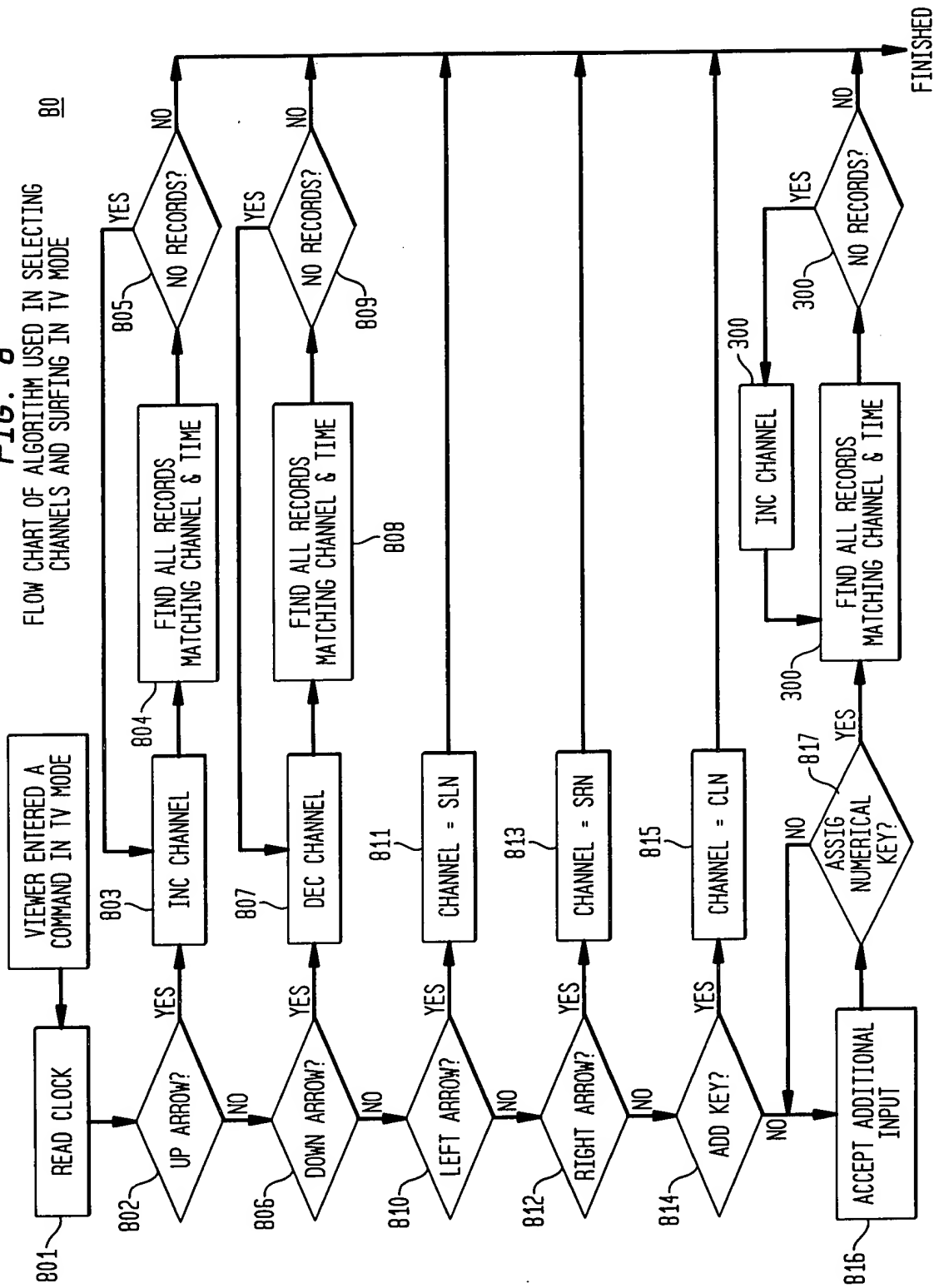


FIG. 9A

FLOW CHART OF ALGORITHM UPDATE THE CHANNEL HAT AND CATEGORY

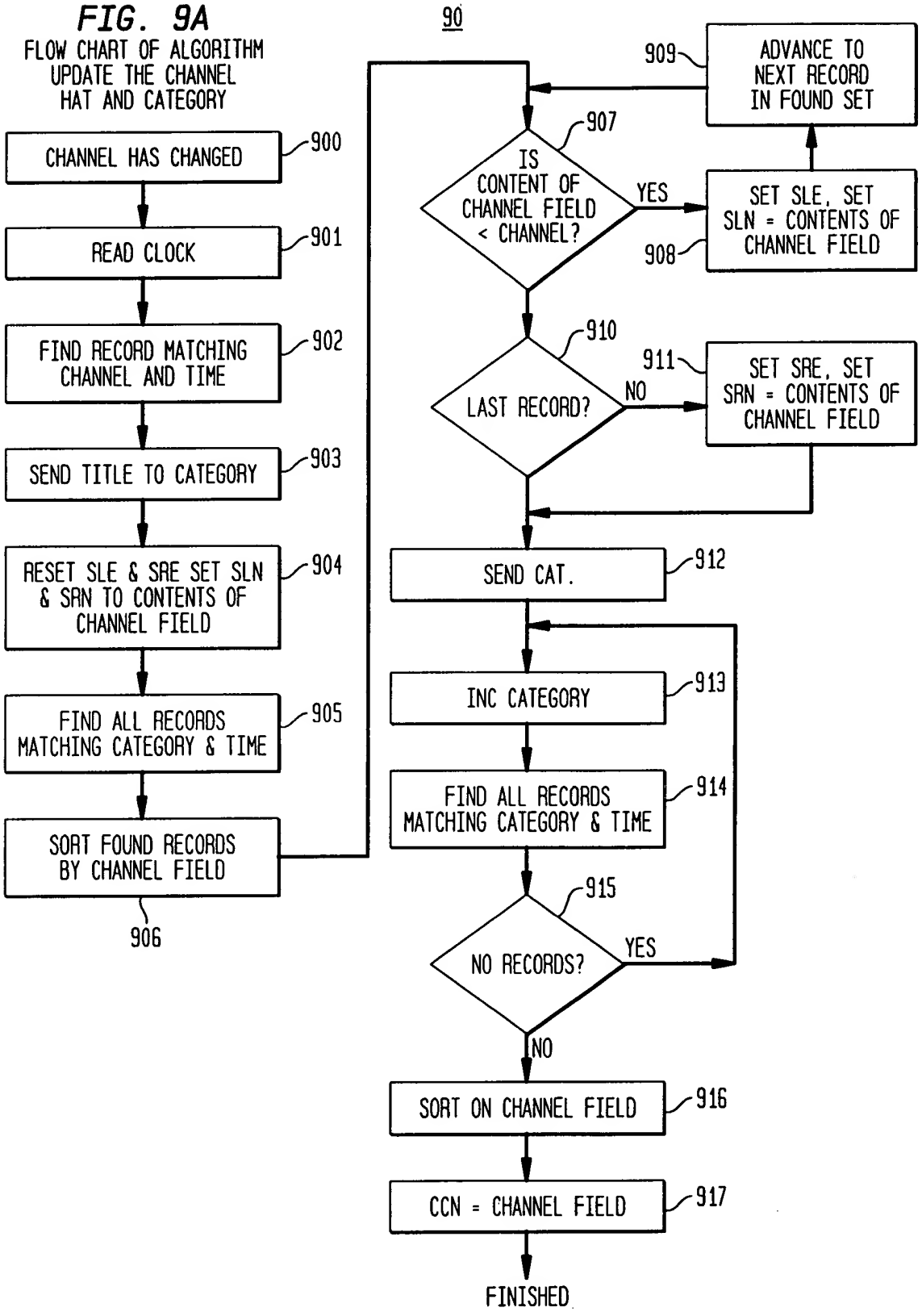
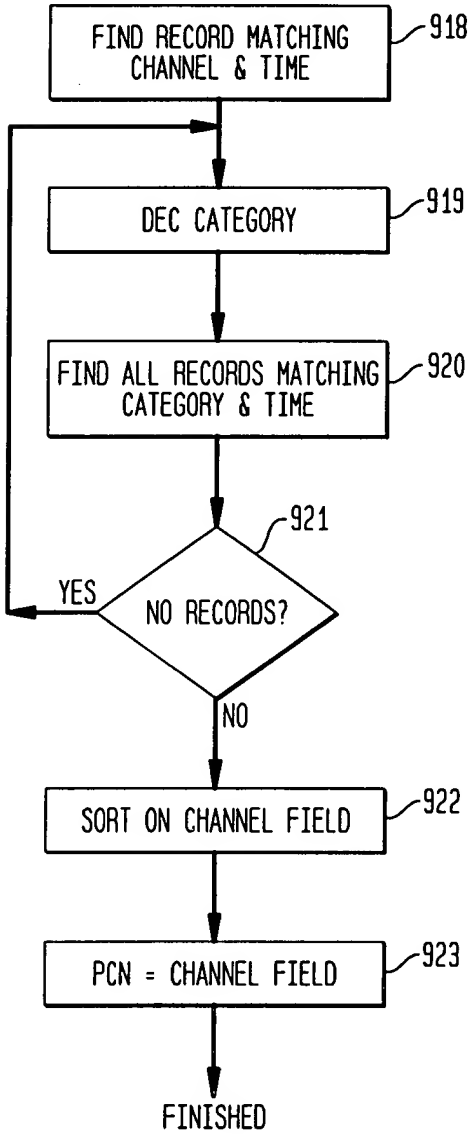


FIG. 9B

STEPS ADDED TO ALGORITHM 90 TO PREPARE FOR SURFING TO A CHANNEL CARRYING A PROGRAM IN THE PREVIOUS CATEGORY